RMIT UNIVERSITY

TAYLOR'S COLLEGE

Wisdom · Integrity · Excellence

MATH2111 Class Exercise 9

Family Name	Other Names	Student No.

CALCULATORS MUST NOT BE USED

1. Suppose that two dice are tossed.

   (a) Write down the sample space S of all possible outcomes.

   (b) Find the probability of getting 5 twice.

   (c) Find the probability of getting an even number twice.

   (d) Find the probability that the sum of the two scores is a prime number.

   (e) Find the probability that the two scores are relatively prime.

(5)

(f) Find the probability that the difference between the two scores is an odd number.

(g) Find the probability that the two scores differ by 3 or more.

(h) Given that the two scores are both even, what is the probability that they differ by 3 or more?

(i) Given that the two scores differ by 3 or more, what is the probability that they are both even?

(j) Are the two outcomes "differing by 3 or more" and "both being even" dependent or independent?